



Valuation of high-growth companies

IMD Lausanne

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Venture Valuation, Switzerland
www.venturevaluation.com

Content



1. **Starting an enterprise: Venture Valuation**
2. Company Assessment
3. Example
4. Conclusion

Own experience

- 1998: Master Thesis at University St. Gallen
- Goal: to do something useful
- Topic: Valuation of high growth companies
- Contact to industry (Novartis Venture Fund)
- Feeling for market requirements, demand

=> Start Venture Valuation in 1999

History

- Spring 1999: Foundation Venture Valuation, contract from Novartis Venture Fund
- Fall 1999: Finished University, 100% operational
- Fall 2001: Cooperation with Germany / Canada
- 2001: Foundation of Corporation (AG)
- 2002: Foundation of Canadian company
- 2003: Swiss Life Sciences Database
- 2004: Cooperation in Asia (Korea)
- 2005: Collaboration with EBD Group

Venture Valuation Today

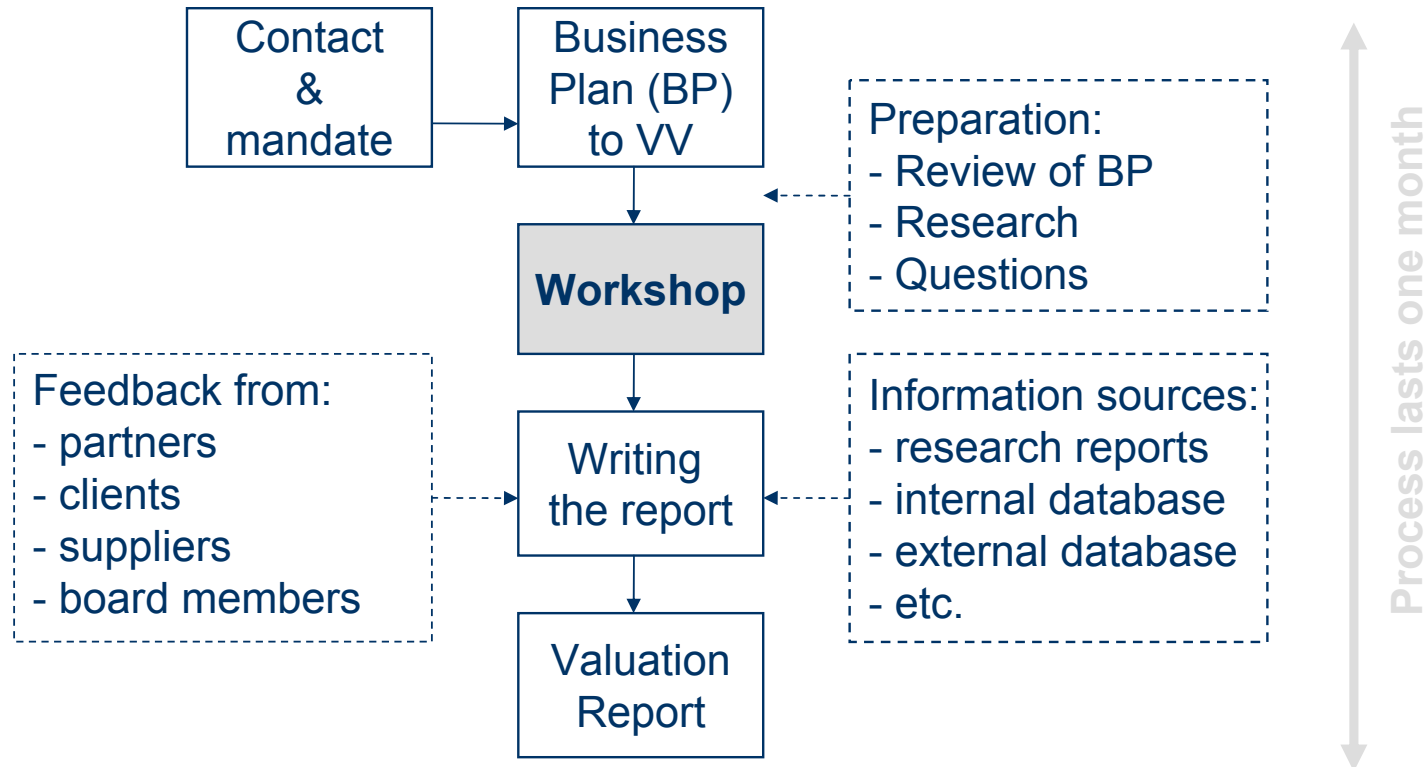
- 1. Independent, third party Valuations
- 2. Biotechgate Database / partneringgate.com
- Experts Finance / High-tech industries
- Not a venture capitalist
- International experience
- Systematic / Validated Approach
- Track record of over 100 valued companies
- Clients such as NVF, Fraunhofer Gesellschaft, European Investment Bank
- 7 people in Zurich; 2 people in India; Representatives: 3 Canada; 2 Germany; 1 Korea; 1 France

Product portfolio



Economic Development	main customers				
Business Angels	main customers				
Non-Profit Organizations / Foundations	main customers				
Investors (VC, Corporate)	main customers	main customers	main customers		
Pension funds					
Companies	main customers				

Process for a valuation



Services



Valuation Report™

Assessment based on soft factors such as:

- Management track record
 - Market Trends
 - Science and Technology
- ⇒ Risk analysis

- In-depth financial valuation based on risk analysis
- Calculation of a value range

Services



Valuation Report (cont.)

- On-site workshop with company
- Feedback on how to increase long-term value of company (value based management)
- Valuation Report as independent analyst report
- Basis for negotiations and investment decision

Methods



Valuation Fundamentals

- Value = future earnings potential / risk
- Valuation methods:
 - Discounted Cash Flow
 - Venture Capital
 - Decision Tree / Real Options
 - Comparable Transactions
 - Market Comparable

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26.09.06
 - **SaKa Ragis Pflanzenzucht GbR**
26.09.06



- General
- Financing
- Management
- Products

Affectis Pharmaceuticals AG



General Description

Company Name	Affectis Pharmaceuticals AG
Street	Kraepelinstrasse 2
P.O. Box	
ZIP/Place	80804 München
Country	Germany
Contact Person, Function	Ms. Sabina van den Brandt, Office Management
Contact Phone	+49 (89) 30622591
Contact Fax	+49 (89) 30622370
Contact E-Mail	info@affectis.com
Website	www.affectis.com
Founded	2002
Source of Foundation	spin-off from the renowned Max-Planck Institute of Psychiatry
Number of Employees	15
Number of Ph.D.s	8
Description of Activities	Affectis AG is a biopharmaceutical company implementing novel concepts for the treatment of depression and anxiety. Affectis is in a very advantageous position, having identified and validated several innovative target genes that play an important role in depression and anxiety. These targets are directly drugable and can lead to the discovery of entirely new classes of antidepressant and anxiolytic drugs which do not only suppress the symptoms but address the underlying mechanisms of the disease. These drugs aim to address the increasing need for more comprehensive and faster-acting treatments with fewer side effects.

- Next Events**
- Sep 2006 - Milan: **Bioforum 2006**
 - Sep 2006 - Geneva: **BioBusiness Network 2006**
 - Sep 2006 - to St. John's: **National Biotechnology Week 2006**
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Partners: Biotechgate.com



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Biotechgate.com

	Country	Biotech	Biotech Instr. & Services	Biotech related	Med Tech	Investor
	Austrianbiotech.com	16	32	13	11	3
	Canadianlifesciences.com	142	62	162	23	12
	Frenchbiotech.com	70	136	19	12	28
	Germanbiotech.com	117	288	77	69	2
	Indianbiotech.com	13	117	202	5	45
	Italianbiotech.com	42	75	126	35	6
	Sweden	24	50	13	27	4
	Swisslifesciences.com	49	145	99	326	43
	Total (biotechgate.com)	532	953	725	514	146

In total there are over **5'000 companies** in the database.

Partneringgate.com



BioTrinity
Oxfordshire
Wed 28.03.2007

BIO-Europe Spring 2007
Milan
Mon 05.03.2007 - Wed 07.03.2007

BIOCOM Investor Conference
San Diego
Tue 14.11.2006 - Wed 15.11.2006

Bench 2 Boardroom 2006
Cambridge
Wed 18.10.2006

Swiss-Scandinavian Bio-Business Seminar
Zurich
Fri 13.10.2006

JETRO BIOLINK FORUM 2006
Osaka
Wed 13.09.2006 - Fri 15.09.2006

BioDevice Partnering
Edinburgh (June 2006)



Lesson learned

- Believe in success, with optimistic-realistic attitude
- Networking is an important instrument
- Use innovative, new approaches
- As an entrepreneur you have much freedom, but also a lot of responsibility
- Implementation is the most important issue
- Innovation & Collaboration
- Focus, Focus, Focus

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Definitions

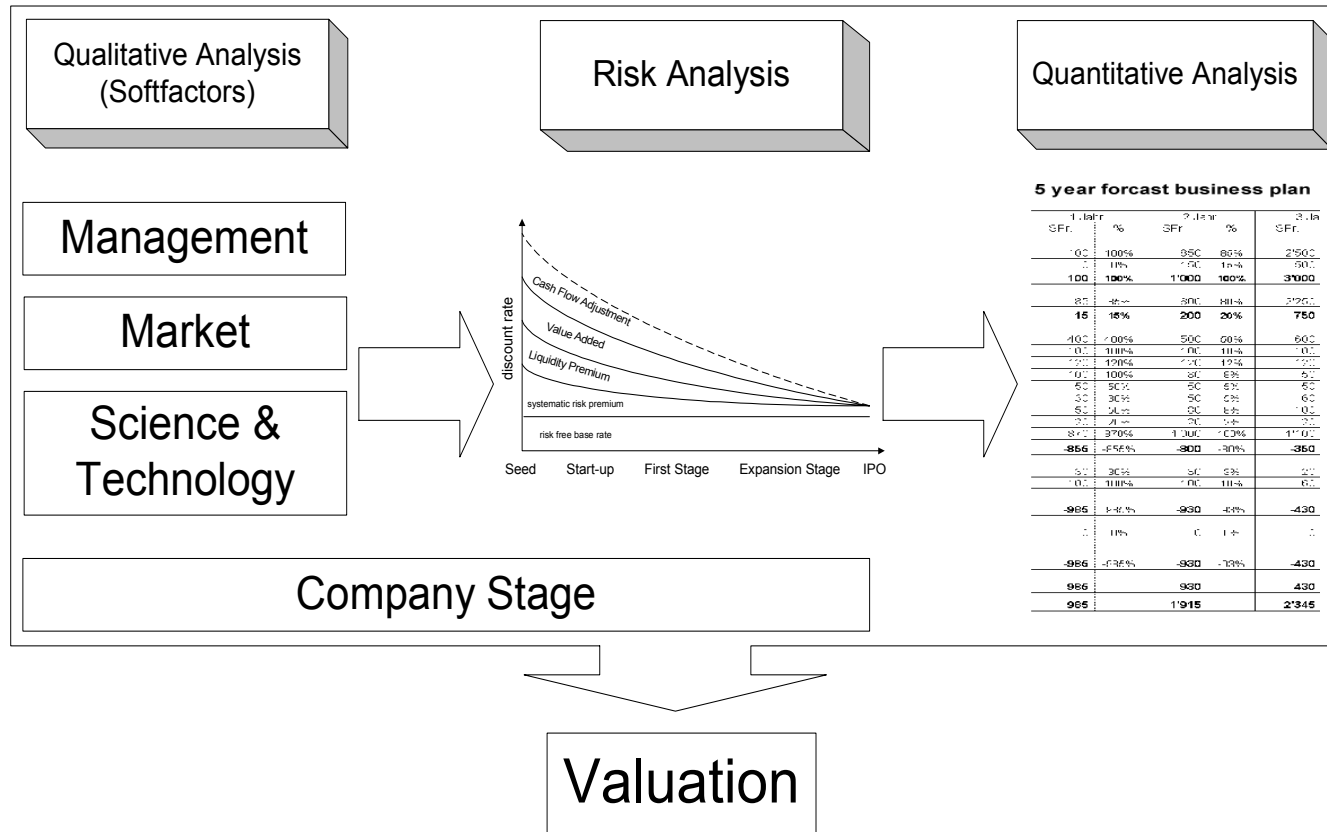


- **Value:** implies the inherent worth of a specific thing
- **Price:** depending on the market (supply / demand); whatever somebody is prepared to pay

“Price is what you pay. Value is what you get.”

By Warren Buffett

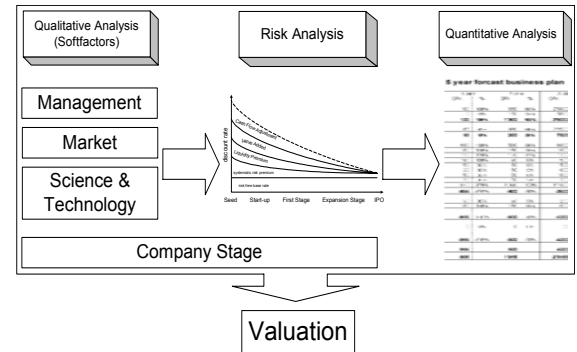
Valuation Framework



Factors to influence value

Soft factors are essential ...

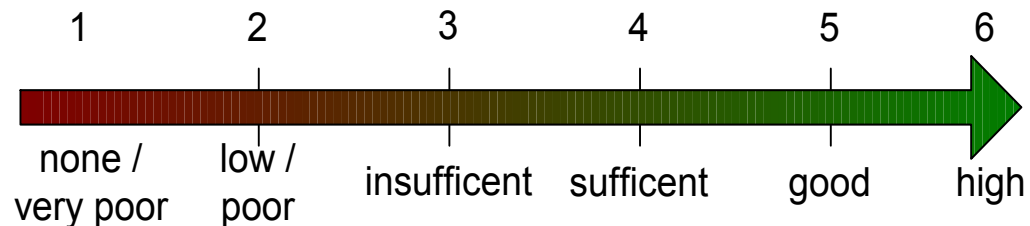
- Management
 - Market
 - Science & Technology
- ... and the company stage
- to define the risk profile of company



Management



1. Completeness skills
2. Track record / experience
3. Motivation / Incentive structure
4. Organization
5. Emotional intelligence / social competence
6. Composition and involvement of boards



Market environment



Industry Structure: (Five forces by Michael Porter)

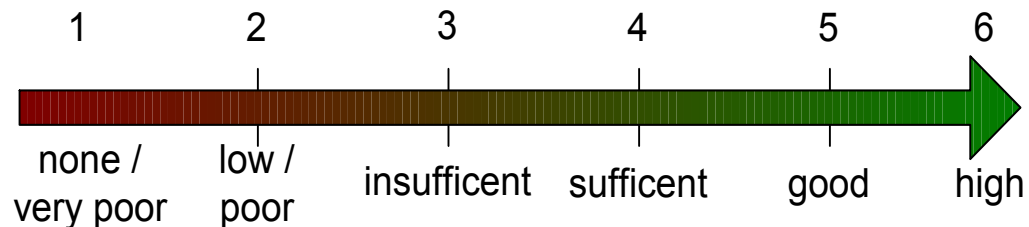
1. Threat of new Entry
2. Rivalry among existing competitors
3. Pressure from substitute products
4. Dependencies on customers
5. Dependencies on suppliers
6. Current and future market potential
7. Customers
8. Political / legal dependencies
9. Cost and Sales estimations



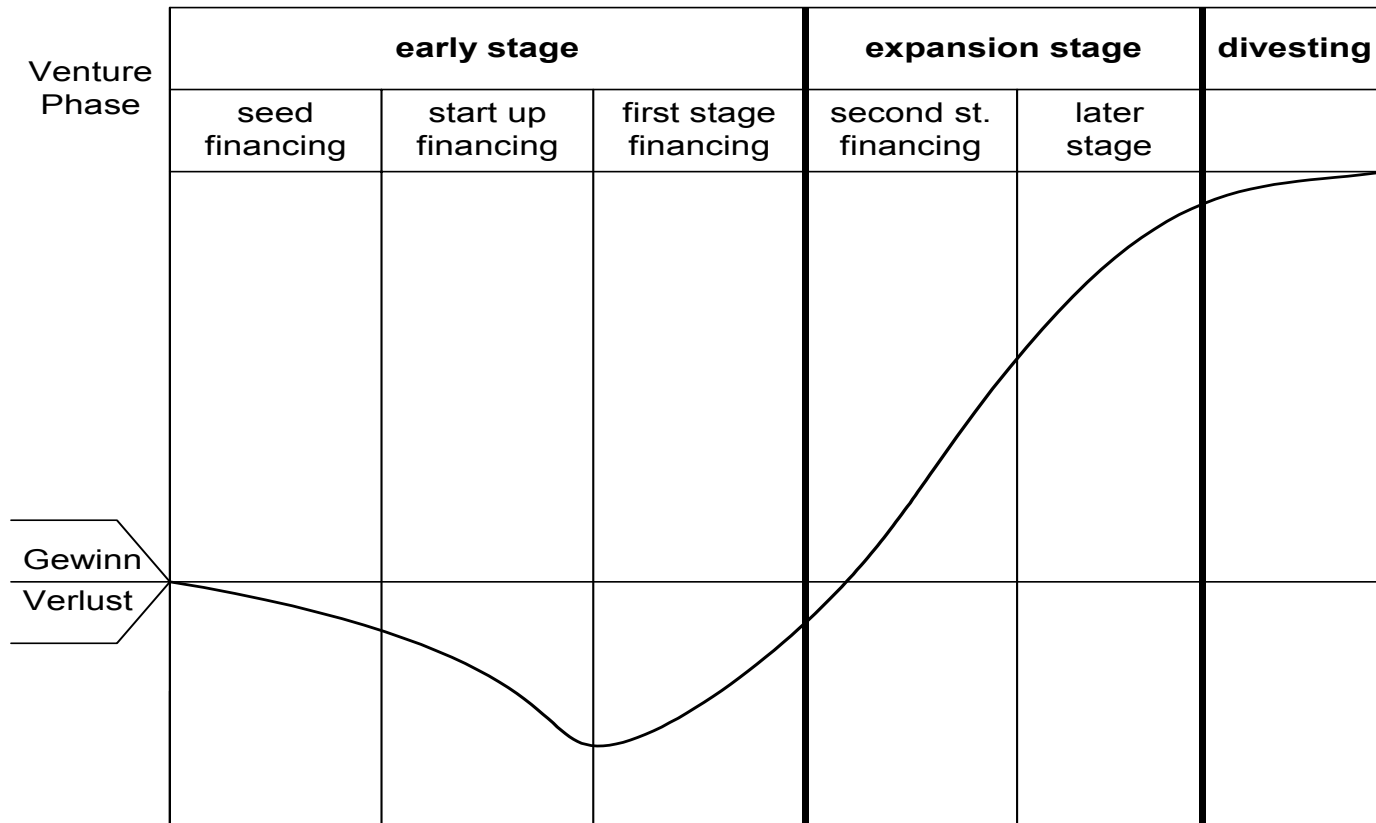
Product, Sciences & Technology



1. Intellectual Property (IP)
2. Unique selling proposition
3. Alliances/partnerships
4. Management of future discoveries
5. Time to market



Company stages



Quelle: Schmidtke.

Content



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Example Company Valuation

GLYCART
biotechnology

- Glycart acquired by Roche in July 2005

- For USD 180 m



- Swiss company; founded in 2000 spin-off from ETH in Zurich

- Technology platform to enhance the activity of therapeutic antibodies (cancer / autoimmune diseases)

- Pre-clinical products

- Existing collaboration with Roche (1 year)

- 30 employees

Example Company Valuation

GLYCART
biotechnology

- Raise USD 31 m in the past
 - Planned to raise another USD 35 m => valuation too low
 - Acquisition offer by mid-sized Pharma
- ⇒ auction process / parallel fund raising

Example Company Valuation



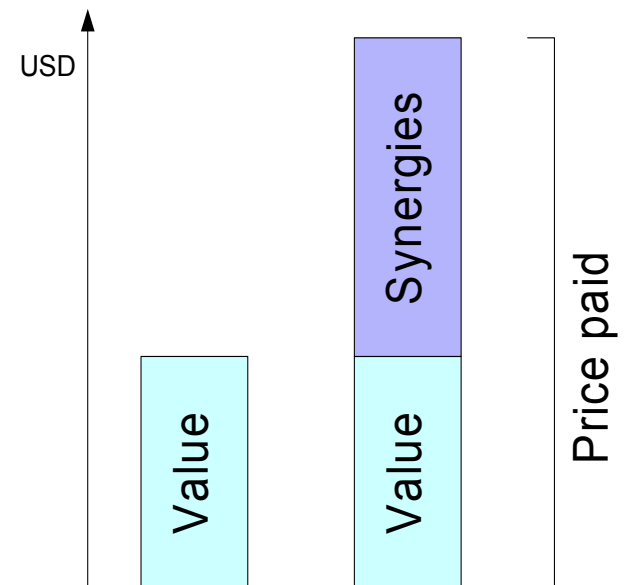
Valuation:

⇒ Pre-clinical compounds USD 180 m?

⇒ Technology Platform?

⇒ Keeping control?

⇒ Value enhancement
for own products?



Common Pitfalls



- Management team not balanced
 - Overestimation of company value
 - Value creating milestones unknown
 - Fundraising too late
 - Lack of funding options
 - Overestimation of time to market
- => Common rule: it takes double the time and double the financial resources.

Content



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Conclusions



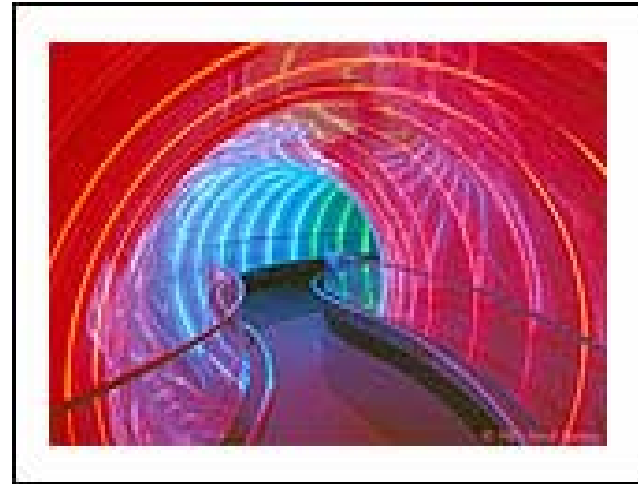
- Valuation is a process
- Assumptions are key
- Solid assumptions => assessment
- Assessment:
 - 1) management
 - 2) market environment and
 - 3) products, science and technology
- Main determinants of valuation:
potential / risk

Conclusions



- Different valuation methods should be used
- Result is a value-range
- Price is not the same as value
- Even though valuations are very difficult, they have to be done
- High growth companies are more difficult to value than traditional companies, due to its less predictable future and higher risks

Thank you



**Bring some light
into the art of valuation**

Scientific Basis

EPFL, Lausanne Dissertation on “Assessment and Valuation of high growth companies”



University St. Gallen, Master thesis

Valuation of Venture Projects, Prof. Scheuenstuhl

Several published articles and papers

Nature Biotechnology, Volume 22, August 2004,

Valuation – what you need to know

=> Available at www.venturevaluation.com